Initiatives In Massachusetts for Recycling Electronics

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I always enjoy being the last speaker at the end of the day -- I find that's when everyone is ready to sit down, listen, and hang on to my every word! Well, fortunately for you the New York Times has done all my work for me, so this will be quick.

I don't know how many of you saw the headline article last Thursday in the Times' new technology section. It is entitled "Where Do Computers Go When They Die?" My favorite part of this article is the list of "10 Uses for A Dead Computer." My favorite on the list -- and what I think we should do Massachusetts -- convert your computer to a litter box for your cat. Just make sure its unplugged or Kitty gets a nasty surprise!

More seriously, I know that rumors have been rampant about what the State of Massachusetts is planning to do in the near future about the designation of CRTs and other electronic components as hazardous waste. I'm here today to share with you what we are thinking about doing on this challenging issue -- and it has nothing to do with cat litter boxes.

Before I do, by way of background, I want to tell you that there are two reasons that Massachusetts is interested in doing something new about electronics reuse and recycling. Those two reasons, simply put, are <u>the future</u> and, <u>common sense</u>.

I've been at the Massachusetts DEP for the last 2 1/2 years and my role there has been to look at the future -- to take it into account and change our regulatory practices <u>today</u> so that we may be in a better position to meet the environmental challenges of tomorrow. Sounds pretty much like the usual rhetoric from another government bureaucrat doesn't it?

Perhaps not.

In Massachusetts we put our money where our mouth is when it comes to common sense regulatory reform. As a former business executive, I can attest that common sense, when it is applied in the marketplace, always spells success when a company rolls out a new product. For some reason, government doesn't always get the simple, yet powerful truth of common sense. Just look at RCRA. When it comes to common sense regulatory reform, whether it is considering changes to the hazardous waste designation of CRTs or changing an incomprehensible federal regulatory system, Massachusetts doesn't go *just* half way.

For example, we are in the process of eliminating industrial permitting in Massachusetts -- <u>completely</u>. Why? Because permitting really doesn't work all that well in Massachusetts or any

other state in the nation. It certainly doesn't work at the federal level as many of you can attest. Our goal in Massachusetts is to eliminate 50,000 permits in the next two years. I'm delighted to say we are already half way there. We've currently eliminated over 25,000 permits. Through a new self-certification system that replaces those permits, called the Environmental Results Program, we are eliminating regulatory time-to-market delays for companies like yours. Let me repeat, we are not just *reducing* time-to-market delays for your companies. We are completely *eliminating* delays.

Another example of common sense change in Massachusetts: My Department is in the process of overhauling *all* 55 environmental regulations in the state -- all of them. We are halfway through this overhaul and I expect that this regulatory "house cleaning" will result in us eliminating up to 12 outdated regulations and streamlining another 28 by 3Q of 1998.

If that were not enough, we are completely overhauling our compliance reporting requirements in the state. Why? I'll let you in on a little secret -- most of the compliance information the federal government requires states like Massachusetts to collect from you -- *no one uses*! Your companies waste hundreds of thousands of dollars feeding federal data systems that the agency doesn't use in their day-to-day management or strategic activities. My staff waste valuable state tax dollars collecting information for the federal government that no one seems to know where it goes or what it is used for. Well, Massachusetts has had enough of this and is putting EPA on the "Jenny Craig Information Diet." This summer, we will be launching a consolidated whole-facility report that seeks only that information which we state regulators are truly going to use. When we win the battle with EPA, it will be the only report you submit. And guess what, we want to work with your companies to ensure that this slimed down report contains information that you use in your facility and process management systems.

With all the common sense that Massachusetts is applying to regulatory reform, is it any wonder that we are also turning our attention to RCRA and CRTs?

Used electronics — Cathode Ray Tubes, in particular — represent a fast-growing component of the solid waste stream today. With new standards for television broadcasts to be implemented over the next five to ten years, a dramatic increase in the number of home PC's, and the ever-increasing speed of technological changes making electronic products obsolete faster and faster, we soon expect to see an unprecedented turnover of computers, TV's, VCR's and other "non-digital" video and audio equipment.

Precisely when this "great clean-out" is going to reach its crescendo is anyone's guess, chiefly because consumers tend to live in denial about the true market value of their used components. It can be difficult for a person to accept that equipment purchased only a few years ago is essentially worthless today. So, many obsolete electronics wind up gathering dust in attics, basements, closets and garages.

Eventually, however, these units will be retrieved from temporary storage and either given away or thrown away. When they are tossed out, the "great clean-out" will have begun. Regardless of when it actually takes place, most experts agree it will be relatively soon — and further agree that the impact will be enormous.

As they so often seem to do, our friends in Europe have broken out of the gate ahead of us in anticipating the challenge and formulating a plan to meet it. Several members of the European Community have adopted retail deposit or manufacturer take-back systems, meaning the sellers or makers of electronics are now required to accept used components returned by consumers. The Canadian Province of Ontario is advocating a similar approach. The question that many of us -- companies and progressive regulators alike -- are asking in is this: Is that the right direction? -- should mandatory programs precede voluntary ones?

While all this has been going on abroad, the U.S. Environmental Protection Agency has taken the position that CRT's are subject to its "toxicity characteristic" or "TC" rule; if CRT's fail the test, then they are managed as a hazardous waste. In short, the TC rule is a method EPA adopted in 1990 to determine whether a waste is toxic. The Agency has since applied it to a number of consumer-type wastes, such as batteries and fluorescent lamps.

Massachusetts adopted the TC rule in 1990 as a "condition" of maintaining its authorization to administer the federal hazardous waste program. But we believe the TC method has significant shortcomings when applied to manufactured consumer items — primarily because it does not take into account that toxics found in many consumer wastes are unlikely to be released into the environment. That is, the TC method is generally used to test "ground up" samples, to determine how the toxics will leach in a landfill. The act of grinding the material in itself causes the item to fail the TC rule. But consumer items, like CRTs and other electronics, generally end up in landfills intact, and so the TC rule is not an accurate predictor of the likely toxicity of the leachate. The result of this complete misapplication of the TC rule is that many consumer-type wastes are being over-regulated as hazardous waste, and this creates a major dis-incentive to cost-effective reuse and recycling.

This misapplication of the TC rule is just the tip of the iceberg. Overall, I believe that RCRA is heading down the wrong path as it begins to focus more and more "downstream" on consumer items such as electronics instead of remaining focused on industrial waste streams.

Let me ask you this: If an old black-and-white TV or monochrome computer monitor is still working, what makes more sense? To encourage the efforts of a private company to recondition and resell it? Or to require that same company to handle the intact CRT like an oozing drum of chemicals?

Given the numbers game all of us in this room will be facing soon, now is a good time to be asking questions like this — and *answering* them *realistically* with *common sense*.

In Massachusetts, CRT's and other obsolete electronics represent a significant and rapidly growing challenge in the commercial and municipal solid waste streams. From current estimates of 75-thousand to 90-thousand tons per year, the volume of discarded units is expected to reach as much as 320-thousand tons annually by 2005 as components now in use give way to such emerging technologies as flat panel displays, high definition TV's and digital video disc players.

Massachusetts is concerned about the anticipated influx of waste for several reasons:

- First, continued disposal of bulky electronic components will unnecessarily accelerate the pace at which the state's few remaining landfills reach their capacity.

- Second, combustion of these items carries a potential public health risk. CRT's contain lead, which can contaminate incinerator ash and prevent its beneficial reuse in asphalt and other products.

- Finally — and above all — Massachusetts is working aggressively to meet a goal of recycling 46 percent of its solid waste no later than the turn of the century. So, diverting CRT's and other electronics from disposal is extremely important.

There are any number of steps we <u>*could*</u> take... But rather than solve the problem, they might only make matters worse.

- First, continuing to regulate CRT's as hazardous waste is not a viable option. In a worst-case scenario, under current federal and state Superfund regulations, your companies remain liable as potentially responsible parties associated with producing a hazardous waste. Just as importantly, the costs are enormous for managing a hazardous waste. Under the current system, a firm wanting to accept used CRT's needs to obtain permits, carry special insurance and comply with elaborate rules — not to mention, use only licensed hazardous waste transporters to bring in its feedstock. All in all, the current regulatory system has a chilling effect on companies who want to do the right thing and profit at it.

- Second, this spring or summer, EPA is planning to broaden the reach of its Universal Waste Rule to include CRT's. Frankly, this idea must be downright scary to those in the private sector who refurbish, resell and export more electronics than they process for scrap. Why? Because it could dry up their markets and drive up their costs. Under terms of the proposed Basel convention, expansion of the Universal Waste Rule could have the effect of prohibiting sales of refurbished black-and-white TV's and upgraded 286 and 386 computers to poorer countries. In addition, the Universal Waste Rule is a *conditional* exemption that allows for alternative management. In other words, the waste still remains under the general purview of hazardous waste management, with all its chilling liability concerns and higher insurance and administrative costs for recyclers and producers like you. Remember, a hazardous waste is still a hazardous waste if your company inadvertently steps outside the bounds of a conditional exemption. Finally, the Universal Waste Rule discourages companies from developing new, cost-effective alternative management systems. In Massachusetts, we think a bit differently than the EPA. We strongly believe in market-based regulatory approaches that spur new markets and enable companies to develop their own cost-effective solutions without being told exactly how.

- Finally, we also disagree with the European and OECD approach. Forcing retailers and manufacturers to take back used electronics is not the answer. To our critics, it's true that Massachusetts consumers pay a deposit on bottles and cans, and retailers are required to take those containers back. But there is a big price difference between soda cans and CRT's. For example, a mandatory system would require a high-end mom-and-pop appliance store on the island of Nantucket to provide the same level of recycling service to customers as an electronics superstore in the city of Boston. Not only is that unrealistic; it can add to the cost of goods, which in turn can generate consumer opposition to your products. Unlike a 60-cent can of soda, a recycling system which is 10% inefficient for electronics would add up to a lot

of money for a relatively small number of retailers and their customers. We think it's premature to consider a deposit until there is a better established scrap market to "harness". As a Republican and as a regulator, I will always pick a voluntary approach before choosing a mandatory approach -- and will choose a mandate only as a last resort. The electronics industry has demonstrated time and time again what it can do if given the regulatory forbearance to voluntarily test things out. Just look at what Compaq and Sun Microsystems have done voluntarily on DFE and take backs -- without mandates.

In short, all of these policies could have the effect of discouraging the reuse of obsolete but working electronics without specifically targeting those units that present the biggest problem — the damaged ones being thrown out in the trash.

Another option, of course, is to do nothing at all. In Massachusetts, we don't believe in doing nothing. Our track record speaks for itself. The used electronics now sitting in attics, basements, closets and garages are going to come out of storage one of these days. And to a lesser extent, from businesses. When those electronics come out of storage, we doubt the Smithsonian Institution will want to put them on display as archaeological relics. We are going to need to do something with them — and we would prefer not to throw them away if we can avoid it. We also prefer to do something *now* rather than wait. That way we can work with you to try some new things out and prove they work before the waste stream increases and before EPA takes formal action.

It only makes sense that progressive states like Massachusetts would look at other, more common sense options. One option we are considering is a coordinated three-step strategy for promoting the recycling and reuse of used CRT's:

- First, we could specifically exempt CRT's from existing requirements that they be handled as hazardous waste, once and for all ending the regulatory burden created by EPA.

- Second, we could aggressively promote the collection and processing of discarded CRT's through a combination of grants to municipalities and incentives to private businesses.

- Finally, we could prohibit the disposal of intact CRT's at all Massachusetts landfills and combustion facilities.

It probably comes as no surprise to you that not everyone is entirely sold on this concept.

- Environmental and public health advocates, for example, ask us, "if lead is toxic to people, why stop regulating used CRT's as hazardous waste?" An understanding of how CRT's are built provides part of the answer. The lead used in making CRT's is chemically bound in the glass matrix. So, unless they are incinerated or ground up, there is little risk of the lead inside them ever polluting groundwater. At the same time, discarded CRT's that still function but are considered obsolete in this country can be reconditioned and sold abroad.

- Another question we keep hearing: "is a disposal ban on CRT's really the best way to go?" We think recent history provides the answer. For seven years, Massachusetts has successfully boosted collection and processing of recyclables — from lead acid batteries and yard wastes to large home appliances and plastic containers — by prohibiting their burning or burial.

Massachusetts has increased its overall recycling rate from 10 percent in 1990 to 33 percent today. We intend to be similarly successful in getting discarded electronics out of the waste stream.

- Across the state, municipal officials wonder aloud if the approach we are thinking about will impose a budget burden on their communities. We can tell them confidently that it won't. If we move forward with a landfill ban, Municipal collection of CRT's for recycling will neither be mandated nor unfunded. Participation in the program would be voluntary and Massachusetts would launch a new grant program — *before* the disposal ban is implemented — to help towns and cities establish curbside or drop-off collection programs. We also would seek the participation of electronics manufacturers and retailers in such an effort.

- And, of course, there are economic questions such as: "is there sufficient capacity in the private sector to support CRT recycling on a large scale?" To handle current levels of waste, the answer is yes. A recent survey of electronic component recyclers doing business in Massachusetts found that a dozen of them would be willing to accept a wide range of old units, including black-and-white TV's and monochrome computer monitors. Some are even willing to accept wet and damaged units if enough intact units can be collected to make recycling cost-effective. Regardless of the regulatory path we choose, Massachusetts clearly needs to grow its capacity to handle the pending "clean out." Toward that end, we will form partnerships with manufacturers and retailers — with you — so that voluntary "pre-paid" recycling and take-back programs become commonplace, and we can avoid mandatory requirements at either the federal or state level.

In addition to all of these "supply side" initiatives to manage discarded electronics, Massachusetts is also actively engaged in our own "demand side" effort to reduce the amount of electronics waste that is generated in the first place. Knowing as we do that manufacturers are acutely sensitive to customer demand, we are amending state procurement practices.

I am proud to say that we stole these ideas from many of your companies and the procurement agreements you have with your suppliers. Here are the things we want to do in the near term:

- First, shift state computer procurements from outright purchases to five-year leases.

- Second, draft "mandatory recycled content" standards for procurement of new monitors.

- Third, establish other "preferred standards" to promote procurement of electronics that are easy to recycle.

So you see, government can take a page from the corporate play book. I'd like to think that government can move out of believing it has all the answers to truly seeking the advice and expertise of individuals like you. That is why you have not heard me commit Massachusetts to a course of action today. We want your input and reaction to the options I've laid out here today. I'm not just being glib. We really want your ideas and active participation, but we are going to need to do it fast -- in the next few weeks before EPA formally signals its direction.

I'd like to think that a strong collaboration between Massachusetts and the electronics industry would have huge persuasive power with EPA and more importantly, Congress.

Before closing, I want to leave you with these thoughts.

The "great clean-out" is coming, and it seems to me that all of us in this room have three clear choices: we can make things happen... We can wait for things to happen... Or we can wonder, "*what happened*?"

Massachusetts is about to make its choice. And we want it to be a choice that embraces common sense. We are not going to wait to see which way the prevailing winds blow at EPA. We are going to make things happen so we can all win. I think the options I have outlined for you today have the greatest potential for helping it happen in the right way, for both the environment and the economy, first in Massachusetts and then around the country.

What choice will the electronics industry make? We hope it will be the same as ours... And we look forward to working cooperatively with you in the weeks and months ahead.

I want to thank you, EIA and David Issacs for inviting me to join you here today and look forward to answering your questions, if you have any. Thank you for your time.